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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,932	07/13/2006	Bernfried Kalthof	292754US0PCT	9274
22850 7590 07/31/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER HAUTH, GALEN H				
ART UNIT 1791		PAPER NUMBER		
NOTIFICATION DATE 07/31/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/585,932

**Applicant(s)**

KALTHOF ET AL.

**Examiner**

GALEN HAUTH

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06/08/2009.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) 4-7 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 09 January 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 07/13/2008  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of claims 1-3 in the reply filed on 06/08/2009 is acknowledged. The traversal is on the ground(s) that the office did not consider the contribution of each invention as a whole, that the claims were not interpreted in light of the description in the specification, and that there is not serious burden for the examination of the different groups. This is not found persuasive because the cited reference (Reifenhauser PN 3229005) discloses the common technical feature of the groups as discussed in the restriction requirement, and additionally the invention as a whole when interpreted in light of the disclosure, as the disclosure fails to provide any increase in specificity to the claimed invention. The groups are therefor subject to restriction. Additionally the four groups are all directed to different statutory categories requiring divergent fields of search.

The requirement is still deemed proper and is therefore made FINAL. Claims 4-7 have been withdrawn from consideration.

***Drawings***

2. The drawings are objected to because there is insufficient description of the Figure in the specification to discern the scope of the invention or how the drawing relates to the claimed invention. The drawings lack reference numerals with a corresponding description of the components of the apparatus. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should

include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Back (PN 4943463) in view of Harper (NPL – Handbook of Plastics, Elastomers, and Composites) and Kessler (PN 4288905).
  - a. With regards to claim 1, Back teaches an extrusion method for thermoplastics (abstract) in which a hollow preform is extruded from the thermoplastic, and once the preform is downstream in the calibration jacket, a second stream of the same material is injected inside the perform (col 2 In 1-16). While Back teaches that the two streams are from independent extruders, the claim limitation of a molding composition divided in its broadest reasonable interpretation reads on using identical thermoplastics in two extruder screws as it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the same source of raw material for both extruders as both use the same material. While Back does not teach a specific length of the calibration jacket, it would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the length of the calibration jacket including to about 20 cm to optimize the process of Back. Back does not teach that the plastic is transparent. Back does not teach that the calibrator is a vacuum tank calibrator.
  - b. Harper teaches that polymethylmethacrylate (PMMA) is commonly used thermoplastic in extrusion processes to form rods, and that typical applications optimize the clarity of PMMA (pg 49 1.5.19). It would have been obvious to one

of ordinary skill in the art at the time the invention was made to use PMMA as a material in the process of Back, because PMMA is a common thermoplastic extruded in rod form similar to the process of Back presenting a reasonable expectation of success resulting in a transparent plastic.

c. Kessler teaches that it was known in the art at the time the invention was made to use a vacuum cooling calibration apparatus following the exit of a material from an extruder (col 1 ln 20-68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a vacuum calibration tank in the process of Back because such was a well known apparatus in the art for extrusion post processing and results in the benefit of the plastic body maintaining engagement with the wall of the sizing device (col 1 ln 33-45).

d. With regards to claim 2, Harper teaches that PMMA is up to 92% transparent to light (1.5.19).

e. With regards to claim 3, Harper teaches that colorants can be added to PMMA (1.5.19), thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a dye in the plastic of Back as such was a well known method for PMMA processing in the art at the time the invention was made presenting a reasonable expectation of success.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 112 for the term "conventional tube extrusion". The term "conventional tube extrusion" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claims 2 and 3 which depend from claim 1 are thus rejected.

#### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GALEN HAUTH whose telephone number is (571)270-5516. The examiner can normally be reached on Monday to Thursday 8:30am-5:00pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571)272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GHH/

/Christina Johnson/  
Supervisory Patent Examiner, Art Unit 1791